

**REMARKS**

Applicants wish to thank Examiner Myers and her supervisor, Mr. Devon Kramer, for extending the courtesy of a telephonic interview on November 10, 2008, at which interview the non-final Office Action issued August 19, 2008, was discussed. In particular, a number of issues related to alleged drawing objections and to a rejection of claim 8 under 35 USC 112, first paragraph resulted in agreement on overcoming these issues. No agreement was reached on allowable subject matter at this time, Examiner Myers reserving her right to officially receive the present amendment and consider the remarks below.

In reply to the non-final Office Action issued August 19, 2008, Applicant has amended claims 1, 2 and 4-8 to clarify antecedent basis issues and to clarify the recited elements, for example, in relation to a preamble of claim 1. For example, the prior art may comprise "a sieve tube, a drive and a pump, the whole apparatus capable of being placed in an underground oil reservoir." The elements of claim 1 that structurally differ therefrom may comprise, for example, a "balancing sieve tube . . . of the drive" as recited. Claim 3 has been cancelled without prejudice or disclaimer. Because the present application was submitted without paragraph numbers and/or line numbers, reference will be made for ease of communication with the Examiner by referring to Feng et al., U.S. Patent Application Publication US2007/0148017, published June 28, 2008.

In her Office Action issued August 19, 2008, the Examiner has objected to the drawings at Pages 2-3, rejected claim 8 under 35 USC Section 112, first paragraph, and claims 1, 2, 5, 7 and 8 under the second paragraph for antecedent basis issues at Pages 3-4. Then, the Examiner has rejected claims 1-3, 7 and 8 as anticipated under 35 USC 102(b) by Kottke, US Patent No. 6,203,288 at Pages 4-7 and claims 1, 2, 3, 7 and 8 as anticipated by Russell et al., US Patent No. 4,687,054 (hereinafter, Russell) at Pages 7-10. Moreover, beginning at page 10, the Examiner rejects claims 4, 5 and 6 under 35 U. S. C. 103 without specifically referring to the rejection but apparently for the alleged presence of the further features of these claims in view of Kottke.

Applicants will first address the drawing objections, then provide an overview of the claimed embodiment, then address the alleged issues under 35 USC 112, first and second paragraphs, and finally address the purported rejections of the clarified claims as anticipated by Kottke or Russell or as obvious in view of Kottke.

### **Drawings**

The Examiner objects to the drawings (comprising Figures 1-5) as failing to show every feature of the invention specified in the claims. Each element complained of will be described as shown in the drawings and supported by the specification except a terminal of a winding 8 as recited in claim 8. Agreement was reached at the Examiner interview that all drawing objections may be overcome in view of the arguments below. Moreover, with respect to claim 8, the Examiner indicated that she would consider a proposal to amend claim 8 to recite “the stator is connected to power terminals of an overground numerical control unit.”

Firstly, it is important to note that terminology is used consistently throughout the specification to refer to similar elements shown in the drawings.

The first complained of element/item is “seal bushings” shown by arrow 26 in Figure 2 and supported as follows per paragraph [0019]: “A group of iron core windings is made up of iron cores 7, windings 8, endcovers 10 and seal bushings 26. . . There is an end cover 10 at the group’s each end. A seal bushing 26 is connected with the endcover 10.” The Examiner finds: “it is unclear what arrow 26 is pointing to in figure 2.” Referring to Figure 2 and the attendant description at paragraph [0019], it is clear that the arrow for seal bushing 26 points to a longitudinal element (a seal bushing), that is, a horizontal line, extending from endcover 10 to endcover 10 below or, as will be discussed below, in an “inside” direction with respect to the windings 8 and iron cores 7. At the interview, it was respectfully submitted that the indicating arrow for seal bushing 26 of Figure 2 is clear when viewed in light of the specification. It is

believed that the objection to the unclarity of the arrow pointing to seal bushing 26 will be withdrawn in a next Office Action.

“Alloy layers on the inside surfaces of the supporting guides” are next complained of. The alloy layers refer to inside surfaces of supporting guides 25 shown in Figure 2. The supporting guides 25 and inside surfaces are clearly shown and may be understood from the specification (“where necessary for an understanding of the subject matter sought to be patented,” 35 USC 113). If the Examiner has any question about “inside” versus “outside,” it would be readily understandable from reading the description that anything internal to the pump housing 14 would be in an internal or in an “inside” direction. Referring to paragraph [0005], “The supporting guides are made from alloy with a smaller inside diameter than the seal bushings.” This is a clear reference to “inside.” Comparing Figure 2 supporting guides 25 and seal bushings 26, the supporting guides clearly have a smaller inside diameter. Moreover, “The stator’s supporting guides (25) and the iron core’s (7) outside surfaces of the reciprocating head form a friction couple via the carbide layers (specific alloy layers) on the inside surfaces of the stator supporting guides (25). . .” Also, at paragraph [0020] it is repeated: “These iron cores (7) and the stator supporting guides 25 form a friction couple via the carbide layers on the inside surfaces of the supporting guides (25).” At the interview, it was respectfully submitted that an inside surface of a supporting guide 25 is shown in Figure 2 as a horizontal line at the lower, inside side of the cross-hatched \\\ element comprising each supporting guide 25. At the interview, agreement was reached that this drawing objection to alloy layers not being shown would be withdrawn on the grounds that the element appears in Figure 2 for each supporting guide 25.

“Oil tube leading to the ground surface” is next complained of. Oil tube 18 is, in fact, shown in the drawings and discussed in the specification. From paragraph [0005], second to last sentence, “The oil tube leads to the earth’ surface.” Oil tube 18 is shown in Figure 1 at the upper (ground surface) end of the embodiment at the right-hand side of Figure 1. It is respectfully requested that for further clarification, the last sentence of paragraph [0018] be amended to read:

“The oil tube 18 goes up to the surface.” Also, see paragraph [0021], “The upper end of the pump housing 14 is connected to the oil tube 18 through a threaded coupler.” Such an amendment to the specification to include reference numeral “18” further conforms the specification to the drawing and adds no new matter. Per paragraph [0021], it is clear to one of ordinary skill that an “upper end of the pump housing 14” is an end of the depicted submersible pump housing that is closer to the earth’s surface. At the interview, it was agreed that the objection would be withdrawn because 1) oil tube 18 is shown in Fig. 2 and 2) described as leading to the earth’s surface. Moreover, the amendment to the specification would be favorably considered.

The next complained-of element is a “winding’s terminal” where a plurality of windings 8 are shown, for example, of the stator of Figure 2. Each winding 8 may have a terminal below ground; (typically one of ordinary skill in the art would understand that a terminal would be provided at a top accessible end of a winding 8). As per paragraph [0019], “The windings are wound radially and arranged axially . . . The winding 8 inside the stator is connected to the overground numerical control unit through a cable.” Each winding 8 is shown by an X in Figure 1 and by crosshatching /// in Figure 2. At paragraph [0005], it is clearly stated, “Windings’ terminal from the stator is connected to the overground numerical control unit.” Per paragraph [0022], “Installation is done by connecting the stator windings (8) to the overground numerical control unit.” An amendment to the specification and to the drawing Figure 2 to show a stator winding’s terminal may be considered objectionable new matter.

Per paragraph [0025], “to guarantee that 3-phase alternating current with specified frequency is obtained at the output end” (of Figure 5); see terminals U, V, W. One of ordinary skill would recognize that terminals of windings 8 are connected to 3-phase alternating current per output end power terminals U, V, W of Figure 5. There are no surprises in the depicted embodiment. See, for example, Russell, US 4,687,054, “downhole lines” 90, 92, 94 for providing AC power in a similar manner to terminals U, V and W. Consequently, at the interview, a proposed amendment was discussed to delete objectionable subject matter from

claim 8 and to replace the phrase regarding windings' terminal with: "the stator is connected to power terminals of an overground numerical control unit." The Examiner agreed to consider claim 8 as amended.

The final complained-of feature is "overground numerical control unit." In the first instance, per paragraph [0017], "FIG. 5 is numerical control circuit." Moreover, it is clearly stated at paragraph [0005], "Windings' terminal from the stator is connected to the overground numerical control unit." Per paragraph [0023], "The numerical control unit comprises three basic parts: a drive power, an inspection and control circuit and an indicating circuit. See FIG. 5." It thus was discussed at the interview that, from the specification and Figure 5, "overground numerical control unit" is shown in Figure 5 and the attendant description. Applicants submit that agreement was reached during the interview that the objection to "overground numerical control unit" not being shown in the drawings will be withdrawn because the unit is shown in Figure 5.

The Examiner is respectfully requested to contact the undersigned attorney of record if she has any questions about the relationship between the present drawings, the specification and the claims. Applicants are more than willing to enter into a dialog with the Examiner to be sure that Applicants have explained their showing of claimed elements in Figures 1-5 and that proposed amendments to the specification do not contain impermissible new matter.

#### **Claim Rejections – 35 USC Section 112**

The Examiner at Pages 3 and 4 of the Office Action rejects claim 8 as non-enabling. The Examiner, as indicated above, is unable to locate "windings' terminal" and "surface power unit." Claim 8 has been amended to conform to the present specification and drawings. Figure 5 shows output three-phase power at U, V, W and "numerical control circuit" and Figure 2 shows windings 8 of a stator. Per paragraph [0022], "Installation is done by connecting the stator windings (8) to the overground numerical control unit." Thus, the Examiner is requested to

withdraw the rejection of claim 8 as allegedly non-enabling when one of ordinary skill in the art would certainly know how to connect terminals U, V and W to a stator having windings 8.

Claims 1, 2 and 4-8 have been carefully reviewed to correct all antecedent basis errors complained of and additional errors not detected by the Examiner and to make further clarifications to these claims as necessary. Applicants wish to thank the Examiner for her careful reading of the claims to detect many antecedent basis errors.

**The embodiment of Claim 1**

Applicants believe that it may be beneficial to the Examiner for Applicants to read amended claim 1 on the drawing figures 1-5 to provide the Examiner with an understanding of the invention. Claim 1 is written in two part “characterized in that” format with the preamble defining what may be shown in the prior art. The preamble to amended claim 1 reads: A numerically controlled reciprocating submersible pump apparatus (see Figures 1-5), comprising a sieve tube (11; Figures 1 and 4), a drive (Figure 1 and Figure 2) and a pump (Figure 1 and Figure 4), the whole apparatus capable of being placed in an underground oil reservoir; wherein the drive consists of a stator (Figure 1; Figure 2) having an upper end (to the right of each figure) and a lower end (to the left of each figure) and a reciprocating head (19, 4, 5, 27; Figure 1 and Figure 3) with iron cores (4; Figure 1 and Figure 3) inside the stator; the stator and the reciprocating head form a friction couple via supporting guides (25; Figure 2) and the reciprocating head iron cores (4; Figure 1 or Figure 3).

Per paragraph [0021], “The pump is designed on the basis of the traditional pump. See FIGS. 1 and 4.”

What is stated after the “characterized in that” phrase in claim 1 is urged to be patentably novel and unobvious in view of conventional pumps. It is respectfully submitted that the Examiner may have confused a sieve tube 11 of the preamble with a balancing sieve tube 3 of the drive shown in Figure 1 due to antecedent basis issues. The “characterized in that” portion of

claim 1 as amended reads as follows: “with an airtight cavity, the upper end of the stator is connected to a lower end of the pump through the sieve tube; the pump is connected to an oil tube; the stator's lower end is connected to a balancing sieve tube, an end plug and an end coupler of the drive serially.”

“With an airtight cavity” is supported by the specification. Per paragraph [0019], the airtight cavity of the stator is described as follows: “They, together with the stator frame 9 and the circular iron cores 7 form the stator’s airtight cavity filled with insulating oil.”

The upper and lower ends of the stator are shown in the drawings and described in the specification. The upper end of the stator, as explained above, is found to the right (its lower end to the left) in Figures 1-4 with the oil tube 18 at the upper (ground surface) right end and an end coupler 1 at the lower left end. Thus, referring to Figure 1 or Figure 2, the upper end of the stator frame 9 is the end of stator frame 9 to the right “connected to a lower end of the pump through the sieve tube” which is denoted 11 in Figures 1 and 4. As can be seen in Figures 1 and 4, the pump is above the stator portion and connected to an oil tube denoted 18 in Figure 1 at the upper end.

A further feature of the amended claim 1, not shown by the prior art, comprises, “the stator’s lower end is connected to a balancing sieve tube, an end plug and an end coupler of the drive serially.” Neither Kottke nor Russell show or suggest a balancing sieve tube of the drive as recited.

As can be seen from Figure 1, the stator’s lower end, to the left of stator frame 9, is connected to balancing sieve tube 3, an end plug 2 and an end coupler 1 of the drive serially as recited. When submersibly pumping oil, oil is pumped through the sieve tube 11 into the pump portion. The oil in the pump space (see space between pump housing 14 and pump cylinder 13) is driven upwards to the oil tube 18 and up to the surface by the solid shaft 19 of the reciprocating head (19, 4, 5, 27) shown in Figure 1 or Figure 3.

To the contrary, Kottke and Russell have respective pumps that are lower in position compared to the present apparatus and their drives are located above their pumps.

An advantage of the balancing sieve tube of the drive shown in Figure 1 to the left of (and below with reference to ground surface) the pump shown with greater particularity in Figure 4 of amended claim 1 is that it has a balancing function and reduces friction as the stator drives the solid shaft 19 of the reciprocating head up and down . The balancing sieve tube 3 thus protects the stator just above it. A balancing sieve tube 3 is thus structurally significant, clearly a different element than sieve tube 11 above the stator frame 9, and has advantages not discussed in descriptions of conventional pumps and drives as represented by Kottke and Russell.

#### **Claim Rejections – 35 USC Section 102**

The Examiner has rejected claims 1-3 and 8 as allegedly anticipated by U.S. Patent 6,203,288 to Kottke (hereinafter, Kottke) and claims 1, 2, 3, 7 and 8 as anticipated by U. S. Patent 4,687,054 to Russell et al. (hereinafter, Russell). The Examiner has referred elements of claim 1 to Kottke and to Russell. Applicants will first address Kottke and then address Russell.

A brief overview of Kottke may be appropriate. Firstly, Kottke shows, for example, a reciprocating pump 10 in Figure 1 with gas inlet and outlet valves 46, 48 at the top, above upper section 40. Pumps 100, 200 and 300 of Figures 2-4 and pumps 400 and 500 of Figures 5 and 6 contain similar elements. A cylinder 14 forms a chamber having an interior compartment 18 where there is a gas to liquid interface 74. The cylinder 14 contains a piston, piston assembly 12, 13 for drawing liquid in via inlet valve 34 and out via outlet valve 36. Stator 52 is mounted outside cylinder 14 and thus outside gas/liquid chamber 18. Firstly, the preamble to claim 1 will be discussed.

With respect to claim 1 preamble and Kottke, the Examiner takes the position that cylinder 14 is a sieve tube as recited. The Examiner, however, may be straining the meaning of “sieve tube” to read “sieve tube” on cylinder 14 which runs the entire length of the pump 10 in



order to meet the “characterized in that” portion of amended claim 1. The recited sieve tube is something different from a drive and a pump according to claim 1 and the stator’s upper end is connected to the pump’s lower end through the sieve tube. This feature is not met by Kottke whose cylinder 14 runs the length of the pump 10.

As amended, claim 1 recites that the balancing sieve tube and serial elements are “of the drive.” Kottke has no such drive and no such balancing sieve tube. If Kottke’s sieve tube is cylinder 14 which runs the entire length of pump 10, it is respectfully submitted that Kottke has no balancing sieve tube of a drive. In other words, claim 1 as amended does not only fail to describe Kottke’s sieve tube, Kottke is absent a balancing sieve tube of a drive. Moreover, the Examiner is precluded by the claim language that a sieve tube can also be a balancing sieve tube of a drive.

The Examiner further opines that a reciprocating head of claim 1 describes Kottke armature 62. An armature is not a reciprocating head. Applicants traverse to the extent that the Examiner, besides straining the recited sieve tube to describe Kottke cylinder 14, refers to Kottke armature 62 (composed of permanent magnets 64; col. 13, lines 7-17). Armature 62 is merely an element, along with pole pieces 66 and so on, of an upper portion of piston assembly 12, 13 which may be a “reciprocating head” as recited. The question remains whether the limitation “the stator and the reciprocating head (armature?) form a friction couple via the supporting guides and the reciprocating head iron cores” of the preamble reads on Kottke. The burden is on the Examiner to make a *prima facie* case of anticipation.

Nevertheless, Applicants have characterized their embodiment as recited in amended claim 1 via a characterized portion. The Examiner states “there is an airtight cavity between the armature and the stator used to ensure that the stator does not get wet, see col. 13, lines 18-30.” Applicants must respectfully traverse. The cited passage does not support a position that the stator is airtight. To the contrary, “the stator is not wetted by the liquid being pumped or by the gas contained within the top section.” This passage simply relates to the fact that the stator 52 is separated by a wall 16 from the gas/liquid inside cylinder 14. In deed, stator 52 appears to be

exposed to the air and has no outer stator frame. It is applicants' position that stator 52 is not airtight as elements 54 are separated from one another and may permit air to enter the spaces between them. Moreover, this airtight cavity feature of claim 1 has nothing to do with an armature 62 (reciprocating head).

Applicants must also respectfully traverse to the extent that the claim recites, with an airtight cavity, the stator's upper end is connected to the pump's lower end through the sieve tube. . ." This language does not describe Kottke. It does describe Applicants' paragraph [0019]. To the extent that one may argue that Kottke's stator has an upper end (for example where arrow 50 points), it is not connected to the pump's lower end which must be at least as low as the presence of liquid pumped within internal chamber 18 or at point 74.

The Examiner states: "The entire stator is mounted on the outside of the sieve tube, and the pump's lower end consists of the bottom of the sieve tube. Thus the stator's upper end is connected to the lower end of the pump, since both are located on the sieve tube." Applicants respectfully traverse. Firstly, is the Examiner saying that the pump is located on the sieve tube which she identifies as cylinder 14? What is discussed at column 13, lines 18-30 of Kottke is an externally mounted stator 52 outside outer wall 16 which has an air gap as shown in circular view 68 formed inside outer wall 16. The pump is labeled 10, i.e. the whole apparatus. A question remains as to how the stator's upper end and the pump are both located on the sieve tube. Applicants require clarification of this rejection. Again, the claim calls for "the stator's upper end is connected to the pump's lower end through the sieve tube." If the cylinder 14 is the recited sieve tube, then, Kottke's sieve tube is both above and below the stator as is the pump 10. Again, clarification of the grounds for the Examiner's anticipation rejection is respectfully requested or the rejection withdrawn as to Kottke.

The Examiner admits that the lower end of pump 10 includes an outlet valve 36. But amended claim 1 reads that the stator's upper end is connected to the pump's lower end through the sieve tube; the pump is connected to the oil tube. Consequently, a fair reading of the claim is that the oil tube is at least as far toward the ground surface as the upper end of the stator. To the

contrary, a fair reading of Kottke is that the pump extends to outlet valve 36 and so the recited oil tube cannot describe Kottke valve 36. Thus, claim 1 “oil tube” does not describe Kottke outlet valve.

Thus, for at least the above arguments, the Examiner has not shown that Kottke provides a *prima facie* anticipation of claim 1 as amended. As explained above, a further feature of the embodiment of claim 1 is a balancing sieve tube 3 . . . “of the drive” which is not shown or discussed by Kottke or connected serially as recited. The Examiner, if she persists in an anticipation rejection based on Kottke, is requested to identify a balancing sieve tube . . . of the drive as recited.

Claim 2/1 as amended requires: “there are many circular iron core winding groups comprising circular iron cores and circular windings inside a stator frame with the supporting guides between the winding groups; the circular iron cores and the circular windings are arranged next to each other, there are seal bushings on circular inside surfaces of the circular iron cores and circular windings; the seal bushings are connected to endcovers; and all these form the airtight cavity.” Claim 2 is patentable for all the reasons claim 1 is patentable and because Kottke has no airtight cavity as recited. To the contrary, Kottke shows no stator frame or seal bushing. Kottke bushing 15 is inside cylinder 14 and forms no part of stator 52. The claim clearly reads “all these form the airtight cavity.” Nevertheless, the Examiner purportedly finds all these elements in an airtight cavity, including seal bushings and endcovers. To the contrary, it is clear and the Examiner admits that Kottke’s bushings 15 are within the interior compartment 18 of cylinder 14 and so outside of Kottke’s stator 52. Kottke does not anticipate claim 2 for all the reasons that claim 1 is not anticipated and for the further reasons given above of having no seal bushing or stator frame.

Claim 7/1 must be read in the context of claim 1 and not in a vacuum. For example, “The stator’s upper end is connected to the pump’s lower end.” The Examiner, for example, takes a position that a sump 120 of Kottke Figure 2 which is at the lower end of the stator 116 can form a circular space as recited. Claim 7 is patentable for the reasons that claim 1 is patentable and

also for Kottke's failure to show a circular space as recited. Moreover, reconsideration of claim 7/1 is requested in view of the further amendments to the claim to define a drive and a pump.

Claim 8/1 is patentable for the reasons that claim 1 is patentable and because the Examiner refers to sealed connection 138 which may not provide an oil tube to a ground surface. It is respectfully submitted the Kottke Figure 2 represents a sump pump, not an oil pump.

Now let us examine Russell. Russell discloses a linear electric motor for downhole use. Linear motor 200 is connected at an upper end by threaded coupling 202 to tubing section 204 and at its lower end to tubing section 208. The linear motor itself has a tube portion 222. The position of armature 300 is continuously checked as the linear motor is actuated. At column 9, the upward and downward movement of armature 300 linked to drive rod 374 translates to piston 376 so a ball 380 moves upwardly as fluid enters via lower opening 378, filling barrel 377. The, the fluid then moves to tubing 208, passage 306 and to tubing 204 as the piston and ball rise and fall.

The Examiner reads claim 1 on Russell as follows. The sieve tube of the claim is alleged to be Russell tubing 208, the drive is linear motor 200 and the pump is sucker rod oil pump 350. Sieve tube of amended claim 1 is not Russell tubing 208 because the feature "the stator's upper end is connected to the pump's lower end through the sieve tube" does not describe Russell tubing 208. It is important to note at the outset that Russell Figure 2B is below Figure 2A. Thus, Russell's pump 350 is below drive Figure 2A. Liquid rises from lower right to upper left of Sheet 2 of 3. Any Russell stator is above the pump which is contrary to the embodiment of claim 1: "the stator's upper end is connected to the pump's lower end through the sieve tube." If the Russell pump of the combination of Figures 2A and 2B are turned upside down to meet the limitation, then, it is respectfully submitted that Russell's pump will fail to operate. Tubing section 208 continues from linear motor (drive of Fig. 2A) into the pump portion of Russell Figure 2B. Tubing section 208 cannot be both a sieve tube and a balancing sieve tube.

Another distinction of claim 1 as amended over Russell is the recited "the stator's lower end is connected to the balancing sieve tube, the end plug and the end coupler serially." Again,

the Examiner may be confusing sieve tube of the preamble with balancing sieve tube of the characterized in that portion, that is, the balancing sieve tube of the drive. In Russell, the lower end of the linear motor (stator) is connected to the upper end of the pump, not to a “balancing sieve tube, an end plug and an end coupler of the drive serially.” For all the reasons stated above, the Examiner has failed to make a *prima facie* case of anticipation by Russell regarding claim 1.

Claim 2/1 is patentably distinct from Russell for at least the reasons given above with respect to claim 1.

Claim 7/1 is patentably distinct from Russell for at least the reasons given above with respect to claim 1. Moreover, Russell fails to discuss a pump housing outside the pump cylinder, forming a circular space between them for sand residue. The Examiner points to the space between sieve tube 208 and barrel 352. The Examiner states without support that this space could be used to collect sand and residue. One problem with the Examiner’s rejection is that barrel 352 is in the Russell pump below the stator and, thus, does not meet the limitation of claim 7/1 when claims 7 and 1 are read together. A further problem is that sand and air could pass together through what appears to be a narrow space between 208/352 in Russell forming a lock adversely impacting normal oil extraction. In deed, the pump may stop during a stroke. Russell thus may provide a structural space and not the functional equivalent of the recited space, notwithstanding the Examiner’s unsupported statement that 208/352 could be used to collect sand and residue. Claim 7/1 has been amended to further define a drive and a pump and reconsideration is respectfully requested of the anticipation rejection in view of Russell.

Claim 8/1 is patentable over Russell for at least the reasons given above with respect to claim 1.

**Claim Rejections – 35 USC Section 103**

The Examiner at Page 10 appears to reject claim 4/1 on the basis that supporting guides are Kottke bushings 15 and so have a smaller inside diameter than the sieve tube 14 which serves as a seal bushing. The Examiner appears to be reading the same Kottke element, cylinder 14, as two different elements of the claim. Moreover, the Examiner states that a sieve tube serves as a seal bushing is located on the inside of the Kottke stator. This is plainly contradicted by Kottke's drawing where cylinder 14 provides an outer wall 16 on to which the stator 52 is mounted. Moreover, there is no relationship between the discussion of a bellows member and a bushing at col. 21, lines 52-67: "a flexible member 310, preferably in the form of a stainless steel bellows, is provided for retaining the non-condensable gas and separating that gas from the liquid in the upper section 40 of the reservoir chamber 22." The closest the Examiner comes to claim 4 via Kottke is that one member of a sump pump may be made of stainless steel. The Examiner admits that Kottke does not teach alloy but has a bellows member 310 made of alloy, namely, stainless steel. The Examiner provides no understandable reason why or how one would read claim 4/1 on Kottke except to find that some portions of pumps may be made of stainless steel.

The Examiner appears to use similar flawed logic for her rejection of claim 5/1. Claim 5/1 is patentable for the reasons that claim 1 is patentable and for the inadequacy of her position that Kottke's use of a bellows member is somehow related to the recited alloy supporting guides.

Claim 6/1 is patentable at least for the reasons that claim 1 is patentable.

Applicants respectfully request reconsideration of the application and claims as amended. Applicants' undersigned counsel invites Examiner Myers to contact the undersigned by telephone to discuss the objections and rejections made in her non-final Office Action issued August 19 if there remain any questions since the interview of November 10.

In view of the above remarks, it is respectfully submitted that this application now is in condition for allowance. No fees are believed to be due for consideration of this amendment. In the event that additional fees are necessary to prevent abandonment of this application, then such fees required therefore are hereby authorized to be charged to **Deposit Account No. 02-4300, Attorney Docket No. 034257R002.**

Respectfully submitted,  
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